

sequence listing
SEQUENCE LISTING

<110> Chan, Raquel

<120> Transcription factor gene induced by water deficit conditions and abscisic acid from *Helianthus annuus*, promoter and transgenic plants

<130> US PCT

<160> 22

<170> PatentIn version 3.1

<210> SEQ ID N°1

<211> 774

<212> DNA

<213> *Helianthus annuus*

<400> 1

tcactagtagtac cataatattc acaaacacac acacctcaga aacgaagctt gcacataatg	60
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aaacgattta cgcacaaaca aataagtttc ctagagtaca tgtttgagac acagtcgaga	180
cccaggttaa ggatgaaaca ccagttggca cataaactcg ggcttcatcc tcgtcaagt	240
gcgatatggt tccagaacaa acgcgcgcga tcaaagtcga ggcagattga gcaagagt	300
aacgcgctaa agcataacta cgagacgctt gcgtctaaat ccgagtctct aaagaaagag	360
aatcaggccc tactcaatca ggtatggttg caaacttaca atgttgcat caactattta	420
agtagttttg aatttttggtg acaataaaga ttgacaaatg ttgtttgata attgattaac	480
agttggagggt gctgagaaat gtagcagaaa agcatcaaga gaaaactagt agtagtggca	540
gcggtgaaga atcggatgat cggtttacga actctccgga cgttatgttt ggtcaagaaa	600
tgaatgttcc gttttgcgac ggttttgcgt actttgaaga aggaaacagt ttgttgaga	660
ttgaagaaca actgccagac cctcaaaagt ggtgggagtt ctaaagagta aagaaggatg	720
tagaagtagt agagtaaaaa ctaaacata ccagatagtt ggtttacact ttgt	774

<210> SEQ ID N°2

<211> 673

<212> DNA

<213> *Helianthus annuus*

<400> 2

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aaacgattta cgcacaaaca aataagtttc ctagagtaca tgtttgagac acagtcgaga	180
cccaggttaa ggatgaaaca ccagttggca cataaactcg ggcttcatcc tcgtcaagt	240
gcgatatggt tccagaacaa acgcgcgcga tcaaagtcga ggcagattga gcaagagt	300
aacgcgctaa agcataacta cgagacgctt gcgtctaaat ccgagtctct aaagaaagag	360

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aatcaggccc tactcaatca gttggaggtg ctgagaaatg tagcagaaaa gcatcaagag	420
aaaactagta gtagtggcag cggatgaaga tcggatgata ggtttacgaa ctctccggac	480
gttatgtttg gtcaagaaat gaatgttccg ttttgcgacg gttttgcgta ctttgaagaa	540
ggaaacagtt tgttggagat tgaagaacaa ctgccagacc ctcaaaagtg gtgggagttc	600
taaagagtaa agaaggatgt agaagtagta gagtaaaaaac taaaacatac cagatagttg	660
gtttacactt tgt	673

<210> SEQ ID N°3
 <211> 1221
 <212> DNA
 <213> Helianthus annuus

<220>
 <221> promoter
 <222> (1)..(1221)
 <223> Large allele

<400> 3	
gatccaattg gaccacctgg cacatcgtat cttatctctt ttgtcgtttc caacacacca	60
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accacgcta tgtccacttg tacttttgtt tgcacacaac tcttccata aaatatcaaa	240
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tcagaatata ctcatctctg aacagtggcg aagcttgacg ttttcgacgg ggggtcggaa	360
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aaaaccgct tggctcaagg atcgaactag cgattgctgc ctactcgctt aatctcccat	720
catcaacagg tgccgccgaa acaaatgct gggggcgga gttgaacctt ggtccagtga	780
cgcacccatg aattttttt ctagggatgc gaacgagtgg ttttaaccata cttttaagag	840
gtgcgatcgg aaattttacc tataaaatac actaaaaaag ttccaagggt ccaccaccc	900
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ccagctacga ctattgaca aaatatcaaa accatatgat tttgagtttt atctcaaccg	1020
aaagtgcacat catgacagag aatcgacata accaaaacgt gtaaactgtac aactcaccat	1080
tgcgttgaaa aggacaaaac aggtaggatt cttgtcaaata tcaacgcgta cacctgtgct	1140

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tcattctaaac cccatactttt aagaaccttt ataaagacca ctcactatat atacacatat 1200
ataatatcac ttatcaaacc c 1221

<210> SEQ ID N°4
<211> 28
<212> DNA
<213> Artificial

<220>
<223> Designed oligonucleotide based on the promoter and having Hind I
II site

<400> 4
gcgaagcttg atgcgaacga gtggttta 28

<210> SEQ ID N°5
<211> 28
<212> DNA
<213> Artificial

<220>
<223> Designed oligonucleotide based on the promoter and having Sal I
site

<400> 5
gcggtcgaca cctggcacat cgtatctt 28

<210> SEQ ID N°6
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Designed oligonucleotide based on the promoter and having Bam HI
site

<400> 6
cgcgatccg agggtttgat aagtgat 27

<210> SEQ ID N°7
<211> 27
<212> DNA
<213> Artificial

<220>
<223> Designed oligonucleotide based on the promoter and having Hind I
II site

<400> 7
cccaagctta acctaagtcc gcctttg 27

<210> SEQ ID N°8
<211> 27
<212> DNA
<213> Artificial

sequence listing

<220>

<223> Designed oligonucleotide based on the promoter and having Hind II I site

<400> 8

ggcaagctta tctcaaccga aagtgac

27

<210> SEQ ID N°9

<211> 19

<212> DNA

<213> Artificial

<220>

<223> Designed oligonucleotide based on the 5' promoter

<400> 9

atttcgcaag tagtcatt

19

<210> SEQ ID N°10

<211> 1015

<212> DNA

<213> Helianthus annuus

<400> 10

gatccaattg gaccacctgg cacatcgtat cttatctctt ttgtcgtttc caacacacca	60
caacacacct acaaactgtgt caattcacac ttcaccaatt tcatttcctt ttagtcaatc	120
atattaaaag tagtagcccc caccgccatt tggtacctac catttccac ttttaataatc	180
accacgcta tgtccacttg tacttttggt tgcacacaac tcttccata aaatatcaaa	240
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cgatcgccac ccactcacct tgtctcccat catcaccagg tgccgcaaaa acaaaatgtt	540
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cataacaaaa acgtgtaaac gtacaactca ccattgcgtt gaaaaggaca aaacaggtag	900
gattcttgct aaattcaacg cgtacacctg tgcttcatct aaacccata ctttaagaac	960
ctttataaag accactcact atatatacac atatataata tcacttatca aaccc	1015

<210> SEQ ID N°11

<211> 28

sequence listing

<212> DNA
 <213> Artificial

 <220>
 <223> Designed oligonucleotide that matches nucleotides 81-100 of the H
 ahb-4 cDNA sequence and having Bam HI site

 <400> 11
 ggcgcatcca acagaaacaa ccaccagg 28

 <210> SEQ ID N°12
 <211> 29
 <212> DNA
 <213> Artificial

 <220>
 <223> Designed oligonucleotide for cloning 5' cDNA and having Bam HI s
 ite

 <400> 12
 ggcgatccc ctggtggttg tttctgttg 29

 <210> SEQ ID N°13
 <211> 34
 <212> DNA
 <213> Artificial

 <220>
 <223> oligonucleotide based on 5' cDNA and having Xho I site

 <400> 13
 gaggactcga gctcaagttt tttttttttt tttt 34

 <210> SEQ ID N°14
 <211> 18
 <212> DNA
 <213> Artificial

 <220>
 <223> Oligonucleotide based on 5' cDNA and having Xho I site

 <400> 14
 gaggactcga gctcaagc 18

 <210> SEQ ID N°15
 <211> 29
 <212> DNA
 <213> Artificial

 <220>
 <223> Designed oligonucleotide based on the promoter and having Eco RI
 site

 <400> 15
 gccgaattca gattgagcaa gagtataac 29

 <210> SEQ ID N°16
 <211> 19

sequence listing

<212> DNA
 <213> Artificial
 <220>
 <223> Designed oligonucleotide based on the promoter
 <400> 16
 acctttataa agaccactc 19

<210> SEQ ID N°17
 <211> 19
 <212> DNA
 <213> Artificial
 <220>
 <223> Designed oligonucleotide based on the promoter
 <400> 17
 acgcaatggt gagttgtac 19

<210> SEQ ID N°18
 <211> 24
 <212> DNA
 <213> Artificial
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 <223> oligonucleotide to DNA-binding assays
 <400> 18
 aattcagatc tcaataattg agag 24

<210> SEQ ID N°19
 <211> 24
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide to DNA-binding assays
 <400> 19
 gatcctctca attattgaga tctg 24

<210> SEQ ID N°20
 <211> 30
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide having Bam HI site
 <400> 20
 gcgggatcca ccatgtctct tcaacaagta 30

<210> SEQ ID N°21
 <211> 30
 <212> DNA
 <213> Artificial

sequence listing

<220>

<223> oligonucleotide having Sac I site

<400> 21

gccgagctct tagaactcca accacttttg

30

<210> SEQ ID N°22

<211> 27

<212> DNA

<213> Artificial

<220>

<223> oligonucleotide having Bam HI site

<400> 22

ggcggatccg tctcccagtt gttcttc

27

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